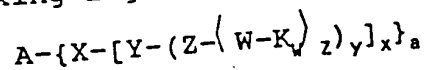


Abstract

Cascade polymer complexes that contain

a) complexing ligands of general formula I



(I),

in which

A stands for a nitrogen-containing cascade nucleus of base multiplicity a,

X and Y, independently of one another, stand for a direct bond or a cascade reproduction unit of reproduction multiplicity x or y,

Z and W, independently of one another, stand for a cascade reproduction unit of reproduction multiplicity z or w,

K stands for the radical of a complexing agent,

a stands for numbers 2 to 12,

x, y, z and w, independently of one another, stand for numbers 1 to 4,

provided that at least two reproduction units are different and that for the product of the multiplicities,

$$16 \leq a \cdot x \cdot y \cdot z \cdot w \leq 64$$

holds true,

b) at least 16 ions of an element of atomic numbers 20 to 29, 39, 42, 44 or 57-83,

c) optionally cations of inorganic and/or organic bases, amino acids or amino acid amides as well as

d) optionally acylated terminal amino groups
are valuable compounds for diagnosis and therapy.

ABSTRACT OF THE DISCLOSURE

Described are new cascade polymer complexes, compositions containing them and use of the complexes in diagnosis and therapy, particularly for magnetic resonance imaging and computer tomography imaging.